

REMARKS/ARGUMENTS

Reconsideration of this application is requested. Claims 1 and 3-20 will be pending in the application subsequent to entry of this Amendment.

Please also see the Evidentiary Declaration (draft -- executed version to follow) of the inventor.

New claim 20 has been added directed to the embodiments of the invention disclosed specifically on page 2, lines 21-22, that is the coating is built up from two or more electrically conductive films and two or more non-conductive films.

Claims 1-6, 8-12, 18 and 19 stand rejected as being obvious over the combined teachings of Buhay et al and Nelson, because it is asserted the skilled person would apply the protective coating of Buhay et al, having a thickness of e.g. 1000 nm, in the glass laminate of Nelson in order to increase the emissivity of the underlying surface.

Applicant views this reasoning inappropriate because of the following. As explained in the Amendment and response of July 28, 2009, the person skilled in the art would be very cautious in adjusting layer thicknesses in an optical stack. Reflection and emission of radiation by an optical stack is very strongly dependent on the thickness of the layers. The thicknesses of the individual layers of the optical stack of Nelson have been carefully designed so as to provide the required interference patterns to reflect the desired radiation. Changing the thickness of one specific layer in the optical stack would lead to different interference patterns which cause the optical stack of Nelson to be unsuitable for the purpose described therein, which is anti-reflection by reduction of reflected visible light (Nelson, column 2, lines 1-6).

Adjusting the thickness of one specific layer in the stack described by Nelson is expected to have a strong and dramatic impact on the performance properties of the entire stack. The skilled person wishing to maintain the favorable anti-reflection properties as taught by Nelson would therefore not be motivated to drastically modify (from 150 nm to 500 nm corresponds to an increase of 333 % !!) the thickness of individual layers in the three layer stack of Nelson.

This unwanted outcome is confirmed in the declaration which modelled the absorption of two coating stacks having multiple conductive and non-conductive layers, in which the thickness of the non-conductive layers were varied. The modelled results show that the absorbance

properties strongly differ. In particular, for wavelengths above 5 μm the absorbance differs by as much as 50-60 % when the thickness of the SiO₂ layer is decreased from 1000 nm to 200 nm.

These results show that adjustments in layer thicknesses are expected to have drastic effects on the overall performance of the coating, in particular the anti-reflection properties which Nelson aims at. Accordingly, the skilled person would not simply adjust the layer thicknesses in a coating stack as the examiner appears to suggest. Therefore, the present invention is not rendered obvious by the combination of Buhay et al and Nelson.

In addition, applicant notes that Buhay et al teach that the protective coating described therein can increase the emissivity of the (functional) layer directly underneath (Buhay et al, page 4, paragraph 34, penultimate sentence). Accordingly, at best the skilled person could be incited by Buhay et al to adopt the non-conductive high emissivity protective coating of Buhay et al as the non-conductive layer closest to the underlying surface of which the emissivity should be enhanced. Buhay et al do not provide any motivation at all to the skilled person for applying the same layer thickness to the at least one other non-conductive layer in the coating of Nelson.

Hence, even if the combination of Buhay et al with Nelson would have been made by the skilled person, which is explicitly disputed, he would still not arrive at the presently claimed subject-matter.

The Official Action also includes three separate rejections directed to various dependent claims; see items 2-4 of the Official Action. Applicants do not separately address these rejections at this time as these are dependent claims and thus rely on the claims from which they depend for patentability; see MPEP §2143.03.

Counsel notes the examiner's findings must be based on substantial evidence, i.e. some concrete evidence in the record. See *In re Zurko*, 258 F.3d 1379, 59 USPQ2d 1693 (Fed. Cir. 2001). ("[T]he Board cannot simply reach conclusions based on its assessment of what would be basic knowledge or common sense. Rather, the Board must point to some concrete evidence in the record in support of these findings.") Applicant provides herewith evidence that disproves the basis for the rejection and the examiner is obliged to accept this evidence as correct or provide substantial evidence (not argument) to the contrary.

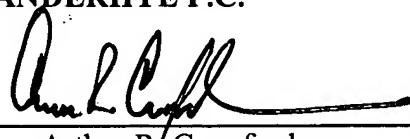
Petrus Antonius VAN NIJNATTEN
Appl. No. 10/563,862
April 22, 2010

Reconsideration, review of new claim 20 as well as the concurrently filed Evidentiary Declaration and favorable action are solicited. Should the examiner require further information, please contact the undersigned.

Respectfully submitted,

NIXON & VANDERHYE P.C.

By:



Arthur R. Crawford
Reg. No. 25,327

ARC:eaw
901 North Glebe Road, 11th Floor
Arlington, VA 22203-1808
Telephone: (703) 816-4000
Facsimile: (703) 816-4100